

Purpose of this report: This report provides visual and text support to aid Round Rock, Texas to become more walkable, balanced, whole, complete, economically competitive, alive and livable. All specific location treatments mentioned in this report are conceptual only. In many cases generalities are offered. A walking audit conducted by an expert explores ideas and concepts, validates and motivates people to act on those things already sensed or felt. This two-day visitation falls short of a comprehensive study, and so recommendations will need to be followed with more formal investigation, structured time and applied design. For specific projects a complete and thorough public process and engineering analysis is required before these concepts are finalized. All concepts shown in this report have been built multiple times in a variety of contexts and are proving workable in a variety of communities. Some of the treatments shown will be more applicable in one area of town versus another. All treatments considered should be analyzed for their value and merit in improving conditions over some anti-walking conditions experienced today. Walkable, Healthy and Active Living Communities are a product of taking appropriate steps — taking on one small-scale initial effort, creating additional confidence and social capital, which then establishes a base of success and a positive attitude for solving larger, more complex problems.

Cities are an invention to maximize exchange (goods, culture, friendship knowledge) and to minimize travel.

The role of transport is to maximize exchange.

....David Engwicht





Round Rock, Texas, was evaluated in late June 2007 for its walkability and potential for improved connections between the historic town center and the new metro center. Dan Burden, *Director of Walkable Communities, Inc. and a Senior Urban Designer/Partner with Glatting Jackson,* conducted a halfday walk, assessment, interview and review. This activity was followed by meetings and briefings with staff, downtown merchants, appointed and elected leaders.

A walking audit was held along principal roads in the Southwest downtown area of Round Rock. This document summarizes changes achieved, underway or needed to make Round Rock more walkable, bicycle friendly and one of the most sought after places in Texas to live, shop, work, invest in a new business, be entertained and play.

In his books "Rise of the Creative Class" and "Flight of the Creative Class" Richard Florida documents how towns that become the most livable; which devote the most capital to establishing and maintaining "place" are those that will be the most competitive

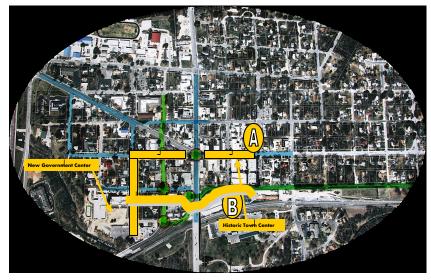


communities in future years. The end of both the agricultural and industrial eras, along with a growing desire by many to end suburban sprawl, means that towns, cities and regions must do much more than generate pipelines to move the maximum amount of traffic at high speed. All urban streets must become places maximizing association, where exchange comes natural and easy.

Round Rock has strong potential to become a model walkable community. Round Rock's historic buildings and town center, well laid out neighborhoods, a well planned new metro center, a well thought thru Southwest Downtown Mixed-Use Redevelopment Plan, recent bonding for new streets, utilities, parks and other amenities, are setting a stage for positive change. Round Rock is ideally located in a strong growth area that is lacking in placemaking. Round Rock should continue its work to further develop a strong, vibrant town core, expand its sidewalks and trails and further manage and tame traffic on its streets. This calls for added public/private partnerships and a new emphasis on planning and modern streetmaking. Added on street parking, conversion of Round Rock Avenue, diversion of traffic through W. Liberty to a new intersection will help.







Making the Connection

Challenges must be overcome. A series of changes are needed. Today Round Rock lacks an effective plan to link the historic center to its emerging municipal complex. Two potential routes exist. Route **A** is made challenging by a poorly designed, wide intersection at S. Mays and Round Rock Avenue. Route **B** is challenged by an uninteresting, uninviting route of travel capped by an ugly bridge underpass (under S. Mays Street). This challenge to both routes is furthered by a lack of quality buildings and "place" along both corridors. Portions of these link areas in downtown have suburban faces. Lack of "eyes on the street" make walking uninviting. Significant areas lack shade. The few public spaces (e.g. Water Tower Park) are isolated, alone and unused. Making either connection is a challenge. Yet this must be done.

A new walkable corridor focused on W. Main Street should be a high priority for public and private investment.





Route B — This faceless parking garage can be converted to "active use" providing "eyes to the street." Photo #2 is the front of a parking garage. All areas along both routes must be designed with public/private partnerships where streets and buildings add to desire to walk.









Security and Multiple Uses of Space. Images in the left panel illustrate some of the many tools now used to activate public plazas, parking lots and related open spaces between buildings. Night lighting and other physical features can make places more welcoming day and night.





From Problems to Attractions — A number of residents are concerned with this walking route, appearing day and night as void of people and place. Both the parking garage and exterior to the historic building can be adapted, enhancing the appearance of safety day and night. Note the building below (right hand side is a parking garage in Charleston, South Carolina.





Human Scale (Buildings, Streets, Walkways in Harmony 2 DEFINED TOWN CENTER AND TOWN/STREET CHARACTER 3 ENCLOSURE / STREETSCAPE, LANDSCAPING, BUFFER FROM TRAFFIC 4 TRAILS. SIDEWALKS AND CROSSINGS 5 6 SECURITY AND TRANSPARENCY (NUMBER OF PEOPLE AND POTENTIAL TO BE SEEN) 7 8 STREET DESIGN -- APPROPRIATE SCALE AND SPEED 9 INTERSECTION DESIGN -- APPROPRIATE SCALE AND SPEED 10 COMPLETE STREET SCORE (BICYCLE, PEDESTRIAN, TRANSIT FRIENDLY) 11 OPEN SPACE/PARKS/PLAZAS -- QUALITY, SCALE, ACCESS, SECURITY, USE 12 SOCIABILITY - NUMBER AND DIVERSITY OF PEOPLE WALKING

Composite scores above 5.0 are considered walkable. Highly walkable communities have scores above 7.0 (total average)

The Walkability Assessment scoring sheet to the left is a first impression of Round Rock's connection between its two town centers.

It may be useful for a small group of citizens and other stakeholders to conduct a more detailed assessment determining those scores they feel most accurately represent portions of this route. The same analysis can be used in other areas of the community.

In conducting a walking audit it is important to understand why these 12 qualities are being measured. People driving through a town rarely see interior neighborhoods, and often their desire to stop, visit or invest in a town are based on "first impressions," which often become lasting impressions. Round Rock needs to stand out as a place.

People who get out of their cars to walk often realize that the scale of blocks, intersections or streets either work or fail the community.

imageability

Imageability is the quality of a place that makes it distinct, recognizable, and memorable. A place has high imageability when specific physical elements and their arrangement capture attention, evoke feelings, and create a lasting impression.

What do the experts say?

"generic places with no character have no imageability"

"really imageable places are recognizable and memorable"

"distinct views can make an otherwise ordinary place very imageable"

"architecture that suggests importance, presence of historical buildings, and landmarks" are imageable

ask yourself "is the place unique?"

Streets filled with people, many signs, and strong landmarks make Times Square in New York City a very imageable place.

Few pedestrians, no street activity like outdoor dining, and no features that serve as landmarks make this street hardly distinguishable from others and thus not imageable. ABILITY HIGH IMAGEABILIT





complexity

Complexity refers to the visual richness of a place. The complexity of a place depends on the variety of the physical environment, specifically the numbers and kinds of buildings, architectural diversity and ornamentation, landscape elements, street furniture, signage, and human activity.

This street is visually complex with many different building and accent colors, places to dine on the street, and many pedestrians.

HIGH COMPLEXITY



What do the experts say?

"many people add to complexity"

"overly controlled design makes a place less complex; you lose complexity with predictability"

"a block with one building is less complex than a block made of several buildings"

"also need complex activity - social complexity"

Few colors, few buildings, and a lack of pedestrians make this street scene very low in complexity

LOW COMPLEXITY

enclosure

Enclosure refers to the degree to which streets and other public spaces are visually defined by buildings, walls, trees, and other elements. Spaces where the height of vertical elements is proportionally related to the width of the space between them have a room-like quality.

What do the experts say?

"Different building heights and levels don't provide the same enclosure as continuous edges"

"old trees with large canopies can make otherwise low enclosed places more enclosed"

"is the space well defined?"

A continuous street wall on both sides of the street gives this scene high enclosure. The buildings and uniform street trees create a room-like effect by limiting long sight lines and views of open sky.

This scene has low enclosure because the arrangement of buildings does not provide a well-defined street wall. The scene feels open, with the ability to see far into the distance with large amounts of open sky.

HIGH ENCLOSURE





LOW ENCLOSURE

Street design

To what extent do streets create comfort for walking with leisure and safety? A good street is one where motorists are behaving themselves. not shoving one another around, and giving full consideration to the pedestrian. High volumes may be fine, but high speeds are inappropriate to urban settings.

What do the experts say?

"streets are places of social and commercial encounter and exchange"

"Streets moderate the form and structure and comfort of urban communities"

"Great streets have 9-to10 foot lanes and 7 -8 foot parking maximum"Alan Jacobs Great streets often vary in their typical sections as they travel through a neighborhood, or community, sometimes with parking, sometimes without, sometimes with sidewalks attached, some not.

DESIGN SCALE

HIGH

SCALE

DESIGN

LOW

DESIGN SCALE

HIGH

DESIGN SCALE

In all cases the design is in context with the places that it helps establish and celebrate.

Well designed streets do not so much follow minimum designs so much as they set upper thresholds for things that often destroy a place, such as oversized turn or travel lanes, medians, sidewalks or planters when not needed.

Good urban streets are most often compact and details are well thought through.





Intersection design

To what extent do intersections create comfort for walking with leisure and safety? A good intersection is one where motorists are behaving themselves, not accelerating into the space, giving full consideration to the pedestrian. Good intersections are compact, taking up no more space than needed for through and turning movements. Turns are made at proper speeds.

What do the experts say?

"When great intersections work it is because of the creation of a pedestrian realm where the cars know this"

"When streets become unsafe, it is almost always when the pedestrian realm does not exist"

.....Alan Jaco

"Great intersections attract pedestrians, poorly designed ones repel them" Dan Burder Great streets often vary in their typical sections as they travel through a neighborhood, or community, sometimes with parking, sometimes without, sometimes with sidewalks attached, some not.

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"For more than sixty years city designers have made changes that are anti-urban, anti-pedestrian and anti-mixed use. As a philosophy, they moved to segregate uses and then they moved to segregate people and cars under the guise of safety, with an emphasis on size — wider, larger — and this is anti-pedestrian. Existing standards are not based on research, they're mostly based on queuing problems".

...Alan Jacobs, Author of "Great Streets"

Human Scale and Imageability. Most roadways in Round Rock are moderate or high on Human and Imageability (memorable) scales. In the photos below note the change in the intersection from one where people seek to get out of town as fast as they can to where there is a desire to linger. A streetscape comes first, but a partnership where buildings come into compliance with an urban form is essential to Round Rock becoming a well recognized place.

human scale

Human scale refers to the size, texture, and articulation of physical elements that match the size and proportions of humans and, equally important, correspond to the speed at which humans walk. Building details, pavement texture, street trees, and street furniture are all physical elements contributing to human scale.

What do the experts say?

"presence of street furniture, protection from traffic; focus on street level;"

"sidewalk cafes on both sides of sidewalk increase human scale"

"presence of stores and activity that invite you in"

"presence of people plays a big role"

Continuous active uses at street level, restricted sight lines that create a roomlike feeling, small buildings, a narrow street, and ample street furniture give this street human scale.

HIGH HUMAN SCALE

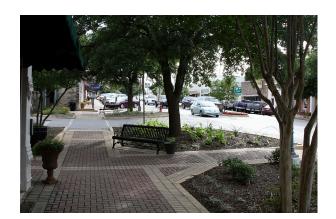
HUMAN SCALE

This street has no active uses or street furniture that would engage pedestrians. Long sight lines into the distance also contribute to this street having low human scale.









The best test of walkability is the number and diversity of people populating the town center from early in the morning to well into the evening. A well made, attractive, corner (left) will not overcome the cumulative effects of missing ingredients such as nearby dense housing, entertainment retail and other reasons to stay, linger and enjoy a place. Despite its exceptional street quality and historic buildings downtown Round Rock remains void of people many hours a day. Adding more off-street parking here is not a solution to the much bigger problem of designing and building a complete downtown, now envisioned in the Southwest Downtown Plan. A master plan for the entire town center will also help.



Walking and Bicycling Environment

Site development standards contribute greatly to the quality of pedestrian environments by "framing" streets and providing interest and activity. Similarly the character of streets, including the design of sidewalks, travel lanes, parking and bicycling facilities impacts the pedestrian realm, and potentially in a more direct way. The pedestrian realm requires attention to pedestrian safety, as well as comfort and ease of access. Pedestrian safety and comfort are directly related to the width of sidewalk, the amount of buffering from traffic, shade, lighting and availability of other pedestrian amenities. In order to assure that a pedestrian-friendly environment is created, clear pedestrian design guidelines should be adopted. At a minimum, include the following guidelines:

- Commercial sidewalks are provided with a minimum width of 8 feet for pedestrian movement, with the minimum front setback of 4-6 feet.
 Where appropriate additional street furniture/commercial use zone should be provided.
- Neighborhood sidewalks should be a minimum of 5 feet, with 4-8 foot planter strips.
- Street trees provide scale to the street, shade, and separation from traffic for the pedestrian. Ideally, trees are planted every 15to 30 feet and placed between 3 to 4 feet from back of curb.
- Pedestrian street lighting is a typically overlooked element when designing streets. Nighttime activities are a critical part of achieving an active district and pedestrian-scaled lighting should be provided along sidewalks with fixtures limited in height ranging between 10 to 15 feet.

- All developed sites should provide at least one continuous intra-parcel walkway of at least 5 feet in width to connect sidewalks adjoining to the main entrance of buildings.
- Wherever feasible, provide one-way, marked bicycle lanes in the same direction of travel as motorized vehicles. Exceptions are one-way streets with an opposite direction bicycle lane separated from travel lanes (contra-flow lane) and main streets where speeds are held to 25 mph or lower. The preferred minimum width of a bicycle lane is 5 feet, or 6 feet when next to parking.
- Provide consistent signing and pavement markings along the length of bicycle lanes, routes and trails. Provide additional wayfinding, as needed.
- Use appropriate markings and signs to end bicycle lanes prior to intersections. The use of colored lanes or "skip" marking through the intersection is recommended.
- At intersections with exclusive right-turn lanes, transition bicycle lanes to the left of right-turn lanes. If right-of-way is a constraint, use appropriate markings and signs to end bicycle lane prior to the intersection.
- In some cases adding paved shoulders of 5-6 feet, rather than marked bike lanes, is a "best choice." This is often done when a roadway change is not long enough to warrant markings, or where an official group has not yet designated a full system.





Manage Parking

Round Rock has the opportunity to increase parking on many streets bonded for reconstruction. Ninety-degree angled parking can increase parking on many streets from 30% to as high as 110%, based on existing angles. Tests to use 90 degree parking can be applied on streets such as the one illustrated below. Although parking with some angle is easier, all people are trained in shopping malls to use 90 degree parking. Today many people are conflicted, saying there is not enough parking, but then saying they prefer 45-60 degree angles to 90 degrees. There is not enough space in most town centers (Round Rock included) to not take advantage of all public streets to maximize parking. Off street parking requires turn radius into each space and access, and there fore take up 600 square feet per space, versus 200 square feet for on-street. Recognizing this, many cities are now turning to maximum off street parking allowed versus minimum required in their town centers. Developers may still invest in a trust for an eventual parking garage, but they are not required to create parking on site.

When back-in angled parking can be used, as much as 7 feet per side can be freed up. Thus, more parking can be found on streets that currently have parallel parking.

- The top right photo illustrates front-in 90 degree parking on a 54 foot wide (curb to curb) street.
- Back-in angled parking can be used to maximize parking on narrower streets. Due to a number of visibility factors, and the rear overhang of a car it is possible to shave 5-6 feet off of street dimensions.
 Tree wells used each 3-4 parking spaces helps create shade and a sense of place.

A number of side streets in downtown Round Rock could increase parking by 30%. This is accomplished by removing curb stops, when appropriate, increasing the parking angle to 90 degrees. This would allow a parking space each 9 feet versus each 11-12 feet.











New Metro Center Mixed Use Public/Private Partnership

Round Rock's new metropolitan center should be considered for a mixed use village sporting coffee shops, outdoor cafes, and a range of housing — from affordable to luxury. The upper right photo example (Soho, Birmingham, Alabama) is an example of a public/private partnership. The city provided the land and design specifications, an appropriate developer was found, and housing is built to watch over and activate the plaza and government spaces. Housing can be diverse, appealing to young couples, families, government workers and seniors. The lower right photo illustrates a mixed use building on one-third of one acre, with 30 dwelling units, a six screen movie house, deli, coffee shop, shoe store and more.























Roundabouts in Round Rock???

Roundabouts — The world's most modern, safe and efficient intersection design, are recommended in five locations in Round Rock's town center. Since roundabouts are new to the region, and several built examples were poorly designed it is imperative that proper data collection, modeling and public process be used.

In a similar challenge in Bird Rock (LaJolla Boulevard), San Diego five roundabouts are being added. Approval was gained from a skeptical neighborhood following a charrette process using the Bleiker method. Benefits of roundabouts include building place, reducing travel times, adding capacity to roadways, dramatically reducing personal injury crashes, increasing property values.



Olympia, Washington Gateway. Example of a 2-lane main-line round-about with one-lane crossings on two legs. Designs with similar features are likely to fit on the S. Main Street and Mays Street intersection.











Final Recommendations:

The proposed realignment, reassignment and entry of traffic from Round Rock Avenue to W. Liberty is a sound means to free up land for a town center. To further enhance this concept it is recommended that the remaining portion of Round Rock Avenue be vacated, freeing up more land for development, providing new public funds for building public infrastructure and allowing needed new buildings to create a continuous and harmoneous town center.

Some of the new W. Liberty traffic should flow onto Blair through a series of roundabouts. These modern intersection tools will keep traffic moving slow, while building quality urban space.

A holistic downtown master plan is also recommended. As this larger area study is prepared a more detailed town center plan can be provided, including a fresh look at maximizing the success of the metro center complex. Broadening the study and analysis will bring out more support, tools and plans to allow surrounding neighborhoods to be revitalized, which in turn will increase personal property values and quality of life.



